

Ion Mudreac

Chief Technology Officer & AI Engineering Leader

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EXECUTIVE SUMMARY

Technology executive and AI engineering leader with 27+ years' experience driving digital transformation across fintech, telecom, SVOD, and intelligence sectors in 7 countries (Romania, Japan, Singapore, Hong Kong, Philippines, UAE, Malaysia). Ph.D. in IT Management and Investment Efficiency. Proven track record of building products and engineering organizations from the ground up — managing technology budgets up to \$60M, scaling teams from zero to 170+, and delivering platforms serving 90M+ users. Currently leading AI/ML integration (local LLM, ASR, NLP) for intelligence platforms serving government agencies. 30+ international conference keynotes. Active open source contributor. Ongoing technology strategy and AI architecture advisor to fintech startups.

KEY ACHIEVEMENTS

- **Led the creation of a next-generation IP traffic interception product** at DataFusion AI Systems, transforming development and product teams around Agile/Lean and implementing eXtreme Programming engineering practices, while deploying on-premises NVIDIA GPU LLM/ASR for intelligence processing
- **Founded and launched a new digital bank** at Mox Bank (\$60M budget under management) — defined cloud and data strategy, recruited the founding 120+ engineering team, and architected the entire technology stack in compliance with HKMA virtual banking license
- **Built and scaled engineering from zero to 170+** at Advance Intelligence (\$2B fintech, \$16M budget) — built core banking, risk management, fraud detection, and mobile application teams, delivering SaFi neoBank and Atome BNPL platform across Southeast Asia
- **Delivered cloud-native OTT platform** serving 90M+ users at HOOQ Digital (\$40M budget), transforming monolithic architecture to cloud-native microservices and engineering data pipelines

CORE COMPETENCIES

Executive Leadership — Technical Strategy, P&L & Budget Management (up to \$60M), Organizational Design and Team Topology, Team Building (0 to 170+), Talent Acquisition, Stakeholder Management, Agile/Lean Transformation, Greenfield Product Development, Digital Transformation, Cross-functional Team Leadership, Platform Engineering, Engineering Culture

AI/ML & LLM — Generative AI, Local LLM (MLX, LLaMA), RAG, Fine-Tuning, Embeddings, Agentic AI, NLP, ASR/STT, TensorFlow, PyTorch, AI-assisted Development (GitHub Copilot, Claude Code, Codex, Google Gemini), Prompt Engineering, Context Engineering, Harness Engineering, MLOps

Big Data & Analytics — ClickHouse, Kafka, NATS, Spark, BigQuery, Bigtable, Athena, Lambda, Hadoop, Apache Airflow, Data Pipelines, Stream Processing, ETL/ELT, Data Warehousing, Data Governance, Real-time Analytics

Cloud & Infrastructure — AWS, GCP, Azure, Cloudflare, Terraform, Pulumi, Kubernetes, Docker, Istio, GitOps, Scalable Cloud Native Architectures, High Availability & Resiliency, Security Architecture

Development — Python, JavaScript/Node.js, Bash, Ruby, Rust, SQL, Nix, Kotlin, Go; leading eXtreme Programming and engineering practices (TDD, BDD, ATDD, Pair Programming, Continuous Delivery, CI/CD, DevOps, Lean/Agile)

EMPLOYMENT

DataFusion AI Systems — Group Chief Technology Officer

Dubai / Kuala Lumpur | Oct 2023 – Present | Reporting to: CEO | Team: 80+ Engineers & Product | Budget: \$14M

Global leader in lawful interception and intelligence technologies (Lumine Group, formerly Nokia/Siemens). Intelligence Platform (IPF), Data Retention (DRS), Monitoring Center (MCng), and Tactical Solutions for government security agencies.

- **Product Security & Governance:** Owned security architecture for intelligence products and customer deployments — application security, network hardening, and data sovereignty compliance across EMEA/APAC (\$14M budget spanning engineering, infrastructure, and AI/ML R&D)
- **New Product Development:** Led next-generation IP traffic interception product from scratch — end-to-end architecture, team formation, and delivery of a new intelligence capture and analysis platform
- **AI/ML Strategy & Delivery:** Pioneered on-premises NVIDIA GPU LLM/ASR pipeline for multilingual intelligence — speech-to-text, language identification, transcription, diarization, and translation — eliminating cloud dependency for classified intelligence operations
- **Engineering Transformation:** Revamped Development and Product teams — embedded Agile/Lean principles and eXtreme Programming (TDD, ATDD, Pair Programming), significantly improving code quality
- **AI-First Engineering Culture:** Established AI-augmented development across 80+ engineers — GitHub Copilot, AI code review, automated test generation, and agentic workflows, reducing development cycle time by 30%
- **Big Data Platform:** Architected high-throughput analytics on ClickHouse for multi-source intelligence data aggregation, correlation, and real-time visualization
- **CI/CD & Observability:** Migrated to fully automated GitLab CI/CD with security scanning; deployed Prometheus, Grafana, Loki, and OpenTelemetry across all product lines

Advance Intelligence Group — CTO, Digital & Retail Banking

Singapore / Manila | Nov 2021 – Jun 2023 | Reporting to: CEO | Team: 170+ | Budget: \$16M

Series D AI fintech valued at \$2B backed by SoftBank Vision Fund and Warburg Pincus. Partnered with investors on technology due diligence and growth scaling strategy. AI-driven eKYC, fraud detection, credit scoring, and **Atome** — Southeast Asia's largest BNPL platform. SaFi Bank: Philippines digital banking.

- **Venture-Backed Execution:** Established SaFi Bank's entire technology organization from zero — recruited and structured teams for core banking, risk management, fraud detection, and mobile application development to deliver digital financial services to unbanked/underbanked populations
- **AI/ML Product Leadership:** Directed AI strategy and MLOps infrastructure — eKYC (facial recognition, liveness detection), real-time fraud detection, and credit scoring models powering BNPL for millions of users across Southeast Asia
- **LLM Integration:** Drove LLM adoption (GPT-3.5, Codex) for customer support automation and developer productivity, reducing call center handling time and accelerating feature delivery
- **Cloud-Native Architecture:** Orchestrated 170+ engineers building Core Banking microservices (Kotlin, Micronaut, Temporal.io, Kafka) on GCP/GKE with Thought Machine core banking engine
- **Security Architecture & Compliance:** Designed end-to-end security architecture (application, network, physical) and achieved BSP regulatory compliance, deploying Cloudflare Zero Trust with YubiKey WebAuthn
- **Multicultural Engineering Leadership:** Recruited and led 170+ engineers across nine distributed hubs (India, Philippines, Malaysia, Singapore, China, UAE, Japan, Vietnam, EU), fostering a unified engineering culture

Singtel Group

Singtel Enterprise — Director, Head of SaaS, Cloud Development & DevOps/SRE

Singapore | Jun 2020 – Nov 2021 | Reporting to: VP, Enterprise & 5G | Team: 30+ | Budget: \$6M

- **SaaS Platform:** Directed engineering for B2B portal (mybusiness.singtel.com) and B2C eShop (99sme.sg)
- **AIOps & Cloud:** Built AIOps portal (Matrix) on GCP/GKE with Pulumi IaC for cloud resale and operations management
- **Solution Architecture:** Led multi-cloud delivery for enterprise clients in Financial, Telecom, Transport, and Government

HOOQ Digital — Head of Engineering Cloud, SRE & Data Engineering

Singapore | Apr 2019 – Jun 2020 | Reporting to: CTO | Team: 35+ | Budget: \$40M | Singtel/Sony/Warner Bros. OTT, 90M+ users

- **Platform Modernization:** Re-architected monolithic OTT platform to microservices with trunk-based development on GitHub Actions, boosting resilience and enabling independent deployments
- **Infrastructure & Data:** Migrated AWS ECS to Kubernetes with Istio service mesh; engineered AI-driven BigData pipelines on Airflow and Athena

Standard Chartered

Mox Bank — Head of Technology: Big Data/AI, Cloud, DevOps/SRE

Hong Kong | Mar 2018 – Apr 2019 | Reporting to: CEO | Team: 120+ | Budget: \$60M | Asia's first digital bank (HKMA license)

- **Digital Bank Launch:** Defined cloud and data strategy from zero — recruited the founding technology team (120+) and established all engineering functions for virtual banking license, expanding access to underserved retail customers
- **Cloud Architecture:** Deployed GCP/AWS with Terraform IaC, Kafka event streaming, and Thought Machine core banking
- **Big Data & ML:** Built analytics on BigQuery, Bigtable, and Dataflow with Google ML toolkit for fraud detection

Standard Chartered Bank — Digital Transformation Lead, Data Group

Singapore | Jun 2016 – Mar 2018 | Reporting to: CDO | Team: 450+ | Budget: \$30M

- **DevOps Transformation:** Directed DevOps/SRE transformation across Enterprise Data Management, API Gateway (Kong), RPA (Blueprism), AI/ML (Instabase)
- **API & Blockchain:** Delivered API developer portal (developer.sc.com) and blockchain payment PoC (Ripple XRP)

Earlier Career (1997–2016)

Commerzbank AG — Global Head eFX/FXO App Management & APAC Head FICC | Singapore | 2009–2016

Led global eFX low-latency algorithmic trading and FX Options application management across APAC

Merrill Lynch — Head of Technology, Pacific Rim Global Wealth Management | Singapore/Tokyo | 2007–2008

Managed technology platform for high-net-worth client services across Asia Pacific

Daiwa Securities – SMBC — IT Project Management Consultant | Tokyo | 2007

Led IT project delivery for securities trading and settlement systems

Mobiliaria Corp. — CTO (Startup) | Tokyo | 2006–2007

Core banking integration (iFlex FlexCube) for MUFG, Shinsei Bank, KDDI, Rakuten Bank

TransContainer (NYK Group) — Technology Strategy Consultant | Tokyo | 2003–2006

Defined technology roadmap and IT modernization strategy for logistics operations

Academy of Economic Studies — University Lecturer & Researcher | Bucharest | 1997–2002

Taught IT economics and published 12 research papers on technology investment efficiency

THOUGHT LEADERSHIP

30+ international conference presentations across AI, Cloud-Native, DevOps, and Fintech:

- **DevOps Days Singapore 2025** — Panel: *The On-Prem AI Challenge: DevOps Strategies for Air-Gapped Success*
- **CIO/CDO SEA Live Series 2022** — Keynote Speaker
- **Cloud Expo Asia Hong Kong 2020** — *GitOps CI/CD as Code*
- **IBM/Red Hat CXOCIETY 2020** — *Architecting the Hybrid Multi-Cloud Strategy*
- **NUS ISS Digital Agility CoP 2020** — *Infrastructure as Code: New Paradigm Shift*
- **QA Financial Singapore 2019** — *From DevOps to NoOps*
- **DevOps Days 2017, 2016** — Speaker
- 20+ additional presentations at Cloud Expo Asia, Google DevFest, AWS Meetups, and Fintech Festival (2016–2024). Full list at mudreac.com

Community Advisory & Organizing:

- **DevOps Days Singapore 2020** — Advisory Organizing Committee

OPEN SOURCE

- **OpenClaw AI Platform** — Contributor (2026–Present)
- **OpenClaw Dashboard** — Creator (2026–Present)
- **OpenClaw Docs** — Creator (2026–Present)
- **IronClaw** — Contributor (2026–Present)
- **IronClaw Docs** — Creator (2026–Present)
- **Harness** — Creator (2026–Present)
- **NixOS Linux** — Contributor (2018–Present)
- **Arch Linux (AUR)** — Contributor (2008–2017)
- **Gentoo Linux** — Contributor (2003–2007)

EDUCATION

Ph.D. *The Efficiency of Investments in Information Technology* — Academy of Economic Studies, Bucharest (1998–2002)

Master's *Efficiency of Financial Investments* — Bucharest (2000–2001)

Master's *Project Management* — Bucharest (1999–2000)

BA *Corporate Management* — Academy of Economic Studies, Bucharest (1993–1998)

BA *Tourism Management and Commercial Law* — EDEN Management Institute, Bucharest (1991–1995)

Certifications:

- Google Professional Data Engineer
- Google Professional Cloud Architect
- Google Associate Cloud Engineer
- AWS Associate Solution Architect
- Red Hat System Administration (RH124)
- Cisco CCNA & CCDA
- Scrum Master
- ITIL v3

Training:

- Coaching — The British Council Bootcamp (2021)
- Google ML/TensorFlow Bootcamp (2019)
- Deep Learning with TensorFlow (2017)
- Elasticsearch Operations (2017)
- ACCI Profitable Leadership Program (2014)
- KEPNER-TREGOE Problem Solving (2013)
- Scrum Master & Agile PM (2012)
- Bloomberg University — Tech Training (2010)
- NUS Business Analytics (2010)
- MDIS Team Leader Development (2010)

PUBLICATIONS

25+ technical articles across Medium, DZone, and blog.mudreac.com. Selected:

- **OpenClaw + QMD + Obsidian: Deployment, Hardening, and Full Rollout**
- **Building a Cross-Agent Memory Layer for OpenClaw**
- **Building a Reproducible Development Environment**
- **Fixing Dockerfile Image Build Consistency**
- **Kubernetes Local Development**
- **NixOS Home Manager on Nix Flake**
- **Google GKE and SQL with Terraform**
- **Amazon AWS EKS and RDS PostgreSQL with Terraform**
- **Microsoft Azure AKS and SQL Database with Terraform**
- **NixOS Native Flake Deployment with LUKS Encryption and LVM**

Full list: blog.mudreac.com | medium.com/@mudrii | 12 peer-reviewed research publications (1999–2009)

Languages: English, Romanian, Russian, Japanese

Hobbies: Road Cycling (Cat 2) | Squash (B1) | Taekwondo (1st Dan)